



A1

2-Channel Power Amplifier



Where Swiss Precision Meets Exquisite Refinement





GRAND PRIX 2012 STEREO SOUND

"THE CH PRECISION A1 IS NOT A GOOD AMP, IT'S AN EXTRAORDINARY ONE". ALAN TAFFEL, THE ABSOLUTE SOUND

"A1 AMPLIFIER - THE BAR IS MOVING". MARSHALL NACK, POSITIVE FEEDBACK

www.ch-precision.com

A1 2-Channel Power Amplifier

As the driving force behind recreating the full musical experience, the task of the power amplifier may seem desperately simple but is indeed highly complex. Achieving the simple goal of "add nothing, remove nothing" to preserve the full musical emotion has resulted in a groundbreaking new amplifier topology. Housed in the 1 series stylish mechanical enclosure, the A1 sets new standards in terms of performance, flexibility of adjustments and pure enjoyment. The A1 is based on a novel proprietary amplifier architecture which optimizes the critical matching of the amplifier with the loudspeaker. While being specified at 2x 100W RMS into 8Ω in stereo or bi-amplification modes and 1x 350W RMS into 8Ω in bridge mode, its internal 1200VA power transformer provides the amplifier output stage with ample energy to accurately and effortlessly drive any loudspeaker.

OPTION BOARD



Monaural Analog Input Board

Three analog inputs - Neutrik balanced XLR, WBT single-ended RCA and high bandwidth coaxial BNC - are provided on a single board. A pass-through XLR connector provides a direct link to other A1 amplifiers. One board is factory fitted.

Modularity

Available operation modes:

- Monaural mode
- Passive bi-amplification mode
- Bridge mode
- Active bi-amplification mode (requires a second monaural Analog Input Board)
- Stereo mode (requires a second monaural Analog Input Board)

Operation modes can be set on the fly from the user interface.

Analog Input Stage

- Pure class A, fully symmetrical design
- Fully discrete, ultra low noise, high slew rate design
- No capacitor in the audio signal path

Analog Output Stage

- Amplifier output stage and listening room temperatureindependent bias, Patent-pending ExactBias circuitry
- Output stage power transistors die and heat sink temperature constantly monitored
- Pure class A ultra low noise driver and class AB pure follower power stage
- No output relay
- Argento loudspeaker binding posts and internal wiring

Power Supply

- 1200VA power transformer mounted on silent-blocks for minimal vibration transmission
- Magnetically and electrostatically shielded transformers
- Hyper fast soft recovery diode bridge rectifiers
- 4-pole 47'000uF reservoir and filtering capacitors

Global Versus Local Feedback Ratio

- Ratio ranging from 0% local feedback only to 100% global feedback only - in 20% steps
- Feedback ratio can be set on the fly from the user interface
- Adjust feedback ratio according to a given loudspeaker or even each specific driver in bi-amplification modes

Gain Trimming

- Trim input gain to accommodate loudspeaker sensitivity and room size
- 24dB range in 0.5dB steps

Protections

- Non-invasive output stage voltage, current as well as power transistors die and heat sink temperature monitoring
- Protection procedures in case of output short circuit, open connection or excessive temperature
- Instantaneous output power and amplifier temperature can be displayed on the front panel

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UNIT SPECIFICATIONS

Analog Inputs	
Input impedance	Balanced (XLR): 94k Ω - Single-ended (RCA and BNC): 47k Ω or 300 Ω
Analog Audio Outputs	
Frequency response	DC to 450kHz (-3dB) at 1W into an 8 Ω resistive load
Total Harmonic Distortion + Noise	Less than 0.01% (1kHz signal, BW 20Hz-20kHz, 10WRMS into 8 Ω , all operating modes), 100% global feedback
Signal to Noise Ratio	Better than 115dB in monaural, stereo and bi-amplification modes, better than 118dB in bridge mode
General	
Display	480 x 272 pixels 24bits RGB AMOLED
Power supply	Selectable 100V, 115V or 230V AC, 47Hz to 63Hz, < 1W in Standby
Overall dimensions and weight	440mm x 440mm x 133mm, 43kg
Software update / Control	USB port for software update / Ethernet based system control

Specifications subject to change without notice. Illustrations are informative only.